

Title (en)

AN APPARATUS FOR FIXING MOLDED BLANKS OF EYEGLASS FRAMES TO A MULTI-AXIS MACHINE TOOL FOR FINISHING OPERATIONS

Title (de)

VORRICHTUNG ZUM EINSPANNEN VON BRILLENGESTELL-FORMTEILEN AUF EINER MEHRFACHACHSENMASCHINE ZUR
ENDBEARBEITUNG

Title (fr)

DISPOSITIF POUR LA FIXATION DE PIÈCES MOULÉES SUR UNE MACHINE MULTIAXIALE POUR DES OPÉRATIONS DE FINISSION

Publication

EP 3587032 B1 20201104 (EN)

Application

EP 19181248 A 20190619

Priority

IT 201800006757 A 20180628

Abstract (en)

[origin: EP3587032A1] Apparatus for positioning and fixing molded blanks of eyeglass frames to a multi-axis machine tool, for finishing operations such as, for example, milling and boring. The apparatus comprises a base plate to be fixed to the worktable of the machine tool and a pair of adjacent cylinders vertically extending from the base plate to which they are fixed at their lower ends, with the interposition of a hydraulic or pneumatic seal. The vertical axes of the pair of adjacent cylinders are horizontally spaced apart from each other by a length that substantially corresponds to the center-to-center distance between the lens receptacles formed in the eyeglass frame blank to be finished. Each cylinder is provided with a respective piston element therein, whose upper end is connected to a cylindrical core whose upper end portion, distal to the base plate, has a frustoconical shape. Said piston element is vertically movable in their respective cylinder, under pneumatic control, thus causing the raising and lowering of the cylindrical core connected thereto. At the upper end, distal to the base plate, of the wall of each cylinder of the pair of cylinders, a radial slide group is housed, each having a respective block of plastic material whose profile can be machined into such a shape as to be able to fit into and engage with the inner profile of the respective lens receptacle, to hold it in position during the processing operations. The radial slides and therefore the respective blocks are imparted a rectilinear radial motion to and from the central axis of the cylinder, obtained by a sliding coupling between the end of each slide, facing the axis of the cylinder, and opposed axial guides radially projecting from the frustoconical section of the cylindrical core connected to said piston element.

IPC 8 full level

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CPC (source: EP US)

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